

- (b) (i) Briefly explain the Principle, operation, advantages, disadvantages and application of CO₂ moulding. (8)
- (ii) Describe with a neat sketch of cold chamber die casting machine. Give its Advantages and Limitations. (8)
12. (a) (i) Explain any four major ways to control the output of arc welding transformer. (8)
- (ii) Explain the three variables involved in Continuous drive friction welding. (8)

Or

- (b) (i) What are the nondestructive tests used in welding inspection? Explain any one method. (8)
- (ii) Explain with a neat sketch the Equipment and process of submerged arc welding. (8)
13. (a) (i) Briefly explain about seamless rolled ring forging. (8)
- (ii) Briefly explain flat strip rolling operation. (8)

Or

- (b) (i) Explain Hot working and Cold working with their advantages and limitations. (8)
- (ii) Explain with a neat sketch the process of wire drawing. (8)
14. (a) (i) Explain the basic nomenclature of tube bending with a simple sketch. (8)
- (ii) Discuss Super plastic forming with necessary sketches. (8)

Or

- (b) (i) What are the different types of stretch forming? Explain any one. (8)
- (ii) Explain with a neat sketch the principle and operation of magnetic pulse forming. (8)
15. (a) (i) What is rotational moulding? State its advantages and limitations. (8)
- (ii) Explain briefly any two bonding methods of thermoplastics. (8)

Or

- (b) Explain briefly with neat sketches two commercially used methods of blow moulding for blowing of plastics bottles and mention their specific advantages. (16)